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FOR RELEASE AT NOON EDT WEDNESDAY JUNE 8, 1966

SHERBROOKE, Que. -- General A.G.L. McNaughton today warned that the sale of Canadian water to the United States would lead to the establishment of a corporation dominated by Americans, administering large areas of Canada.

In a speech to the Royal Society of Canada, General McNaughton foresaw the emergence of such a corporation from proposals by the Ralph M. Parsons Co. of Los Angeles to divert Canadian water to the U.S. The Parsons company applies the name North American Water and Power Alliance -- NAWAPA for short -- to its plans.

General McNaughton said that "the NAWAPA proposal contemplates that the complete jurisdiction and control will rest with a corporation which, although it might be nominally international, would in reality be dominated by Americans...." He said that the corporation "would inevitably, in the nature of things, have to assume quasi-sovereign power to administer large areas of Canada at the expense of Canadian sovereignty."

The NAWAPA plan would mean that most of the waters of North America would be drawn off for the benefit of the U.S. midwest and southwest -- "where existing desert areas will be made to bloom at the expense of development in Canada."

More....

The general, who was chairman of the Canadian section of the International Joint Commission from 1950 to 1962, commented on the possibility of cutting off the flow after Canadian water has been sold to the United States:

"To me it is obvious that if we make a bargain to divert water to the U.S. we cannot ever discontinue or we will face force to compel compliance. There is nothing in our experience to date which indicates any change in the vigor with which our American friends pursue objectives which they deem in their national interests, however much this may hurt a neighbor who has unwittingly made a careless bargain in other circumstances.

"Instance after instance can be cited in support of this observation, from the case of the Similkameen River after World War I to the most recent example, when the Columbia River Treaty was hailed in the Senate of the United States as having achieved one major American objective, which was to prevent Canada from making best use of her waters...."

General McNaughton noted that the United States is now getting Canadian water under the terms of the Columbia River Treaty. He also noted that the Canadian Minister of External Affairs, Paul Martin, has given assurances that Canada can make use of its Columbia waters for consumptive purposes at any time and in conjunction with power generation in transit.

The general posed this question: "When Canada does exercise this reservation, which I regard as inevitable, will the U.S. acquiesce in this interpretation of provisions in the protocol agreed to by the executive of the United States but not included in the ratification by the U.S. Senate?"

For Release:
12 noon
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ADDRESS TO THE ROYAL SOCIETY OF CANADA

by

A.G.L. McNaughton

Sherbrooke, Quebec

June 8, 1966

Mr. President, Ladies and Gentlemen:

I should like to thank the Royal Society of Canada for giving me this opportunity to set forth my views on the uses of Canada's water. I should also like to thank the Society for providing a forum for discussion of the important questions of the exploitation of Canada's water and whether it should be diverted to the United States and the related questions of the development of the resources of this country and perhaps even its survival and growth as a nation.

Canada has been endowed by Divine Providence with abundant resources which confer immense advantages upon this country. It is our responsibility to use these resources with discretion, and to treasure the more basic of them for the generations of Canadian citizens who will come after us is a paramount responsibility. Of our many resources, two are basic: I speak of land and water, and in Canada, they are closely related; we alienate or squander either only at our peril.

For this reason, vital and important questions are raised concerning this country's future by propositions such as that currently being touted under the somewhat pretentious name of the North American Water and Power Alliance or NAWAPA for short. Of course this proposal is not an alliance at all, it is nothing more than an attempt by the Ralph M. Parsons Co., of Los Angeles, California, a private engineering firm, to drum up business for themselves.

A great deal of publicity has been created for these proposals in the United States and much attention has been directed to them in Canada. I feel obliged to say, therefore, that they are quite unacceptable, and to set forth the position which should be taken by Canada and the provinces. Despite some temporizing pronouncements which have been issued by distracted politicians, I believe that this position represents the view being taken by our best informed technical and administrative officers and by responsible members of our engineering profession who are best qualified to judge the merits and demerits of any physical arrangement.

There are similar, and indeed possibly associated schemes, being put forward in Canada by such people as Thomas Kierans of Sudbury, whose GRAND canal scheme would divert rivers flowing into James Bay and more recently by Professor Edward Kuiper of the University of Manitoba, who would reverse the flow of a large part of the Nelson and Churchill Rivers flowing into Hudson Bay. The origin of the waters affected in these schemes lies for the most part in several provincial jurisdictions except for the Red River where, in small part it, may be a re-export of some waters originating in North Dakota and Minnesota. With this one exception these rivers are all national rivers of Canada -- that is, they flow entirely within Canada, from source to mouth, and therefore the benefits which accrue from them belong wholly to Canada. Over national waters, there can be no question but that the jurisdiction of the nation in which they are situated is supreme. Canada would be foolish indeed to recognize or permit any international character to be ascribed to these national waters, and they would assume just such a character if they were to be subjected to any international study.

Within Canada, the rights to ownership of interprovincial rivers as between upstream and downstream provinces is by no means clear. One might suppose that claims could be based on any of the various doctrines which may have superseded that of riparian rights. In any event, the physical jurisdiction largely rests with the particular upstream states concerned and they have made their views quite explicit. British Columbia, Alberta, and Saskatchewan have made the clearest declarations against the sale of Canadian waters; and Quebec is too well informed and too intimately concerned over water for the public welfare to be drawn into export, especially for compensation in the form of a silly project like a canal to Knob Lake, which forms part of the Parsons scheme. An example of the position taken by Provincial Governments is that of Premier W.A.C. Bennett, who said that British Columbia "will sell the U.S. hydro electric power but not water. Even to talk about selling it is ridiculous. You do not sell your heritage."

It should be noted that no government or government agency on this continent has commissioned any technical study on NAWAPA. Indeed, there has been very little formal government discussion on even the possibility of such studies. I have not overlooked the discussion of the NAWAPA scheme by a United States Senate subcommittee. Nor have I overlooked the fact that the United States Government has not seen fit to act on a Congressional resolution to refer the NAWAPA scheme to the International Joint Commission for study.

It should be noted also that the Canadian government, in referring the problem of Great Lakes levels to the IJC, expressly forbade studies of plans such as the Kierans GRAND canal scheme, involving purely national Canadian waters. At the same time, it must be noted that a joint Canada-Ontario stock-taking of northern Ontario waters is proceeding. To this must be added the fact that Quebec, where some of these rivers for diversion are located, has declined to answer an invitation to join in these federal-provincial studies.

One independent scientist who has spoken out is Trevor Lloyd, Professor of Geography at McGill University. In a paper in February, Dr. Lloyd had this to say about NAWAPA:

"Clearly, we have here an exercise in sophomore civil engineering which has received far greater attention than it deserves. It underlines the danger, all too familiar to geographers, of allowing the drawing office to replace acquaintance with the land and the people as they really are."

Canada is a vast land. Its many resources are so great that we have yet to take the measure of them. We also have a great deal of fresh water, but the available amount, it seems to me, tends to be frequently overstated, and we have suffered in the past from permitting such overstatements to remain uncorrected, and it seems to me that they are being made with growing intensity in the propaganda with which we are being deluged.

Canada is a land of hundreds of thousands of lakes. These lakes are full of clear water, which has accumulated there as the glaciers receded thousands of years ago. The large surface of these lakes has a profound effect in modifying our climate from the harsh extremes of the continental effect which would prevail without their presence. But this is water in inventory; if it is removed it will not be replaced; moreover, its removal could reduce the amount of rainfall, and therefore reduce the supply of running water. It is only the running water that can be regarded as available for use, for it is only this water which is replenished by rain and snowmelt; it is only this water which can be regarded as perpetual, and even then, only if it is properly managed. And it may come as a surprise to some, but this second kind of water, the kind we can use, is by no means as abundant as is generally supposed. In fact, our total streamflow in Canada is not limitless as is so often imagined, but is of a similar order of magnitude to that of the United States. The United States also has vast supplies of water in inventory, but a great proportion of theirs is underground: this means that it is situated beneath space that can be used for living. In Canada, we have much less habitable and arable land; it may be that in the future, we will have to conserve this for ourselves, and this in turn means that we do have to look with care before we put any more of it under water.

The NAWAPA scheme seems to be based on the premise that there are large quantities of surplus water in Canada. Any large scale withdrawal of our water from the north raises questions which need careful analysis before any major discussions can be permitted, even in Canada.

The first of these that I would mention has recently been called to attention by H.A. Neu of the National Research Council. His advice is that a Canadian Committee be formed on water, weather and vegetation to carry out certain studies before any system of water diversion is brought under consideration at all. Even the slightest changes in water may have far-reaching effects; the danger lies in the fact that related climatic changes could affect vegetation and biological life if water flows were changed. With decreases in local stream-flow the climate of a region could assume a more continental character -- hotter during the warm months, and colder during the winter and fall. Because of temperature changes, plants might not be able to survive the heat of summer or the cold of winter. It is conceivable also that such changes in climate might alter the water supply due to a change in the regime of precipitation.

Then there is the question of permafrost which occurs in Canada in large lenticular masses imbedded in the soil at considerable depths. If these are subject to inflow of heat by flooding of the surface, the permafrost melts and certainly constitutes a dangerous basis for works to impound the vast areas of storage which have been indicated.

The NAWAPA propagandists love to talk of great quantities of water spilling unused into the Arctic Ocean. But the major sources for the scheme are hundreds of miles from the Arctic Ocean. They are in fact, the rivers of the Canadian cordillera which provide a great series of prime power sites, rivers which form the basis of one of the world's great concentrations of the forest product industry, rivers which provide some of the finest salmon runs in the world.

There are detailed plans on the Canadian drawing boards; there are projects now under construction to harness these flows. The associated mineral and forest resources are already staked out, and the required human and financial resources are being attracted to the region. The NAWAPA promoters would move all of this out of Canada, the people, the industry, the water. It can only be described as madness to believe that Canada has surplus water in an area that is so obviously earmarked for major resource development, and where so much is already taking place.

NAWAPA, of course, has nothing to do with maximum development of these rivers or resources in Canada. Its purpose is to flood the valleys in Canada, and to drain off the water in regulated flow for beneficial use in the United States. But the valleys themselves are of vital importance to British Columbia, because they contain the level land which is so vitally needed for roads and railways, for industries, for people and for agriculture. Whitehorse and Prince George would be submerged, and their land with them, as would countless miles of railway and highway. These irreplaceable assets would be destroyed in the name of trans-mountain navigation.

The grandiose concept starts with the collection of the waters of the Yukon and the Peace in the Rocky Mountain Trench, that great intramontane valley which stretches through our western cordillera at an altitude of half a mile above sea level. It reaches from Montana to Northern B.C., and they would put it all under water.

This scheme ignores all of the plans which have been made in Canada for the use of the waters and the lands of the Rocky Mountain Trench. For example, it ignores Canadian plans to capture the waters of the Yukon by backing them into the Atlin Lakes and thence through a head of something over two thousand feet for power in Taku inlet. It ignores the fact that the Peace River is being harnessed for power at this very moment; it ignores the development plans which presently exist for the Fraser and Thompson Rivers. It seems to ignore developments which are under construction on the Columbia River, from which the United States will receive some 50 million acre-feet of Canadian water in the form of regulated flow, at a cost to the United States which is less than the cost to Canada of constructing the dams. Surely this is enough pillage in the appropriation of our waters, without further extension into the national domain.

If, in the course of development of British Columbia waters, there is water left over, the Rocky Mountain Trench is the natural reservoir for it, and the Canadian west -- not the U.S. northwest, or southwest or midwest -- is the logical beneficiary.

The natural reservoir sites of the Rocky Mountain Trench were not discovered by Parsons engineers. The Peace River waters now being dammed up by British Columbia will be held in the Trench by structures outside it. The Trench will provide a reservoir for water of Canadian origin from the Kootenay branch of the Columbia, to be impounded by the United States at heavy cost to Canada in terms of sacrificed opportunities, as well as in benefits which should, in equity, be payable for Canadian waters used for consumptive purposes in the U.S.

Parsons engineers did not originate the idea of pumping water over the Rocky Mountains from reservoirs in the Trench. The capture of Columbia and Kootenay waters in the Trench, and their diversion over the Rockies, is the logical first step in development of additional water supplies for the Canadian Prairies.

Studies made or underway by the provinces of Alberta and Saskatchewan have already laid the groundwork for extensive utilization of the Saskatchewan River system. Saskatchewan studies even cover the underground water courses of this system.

Tentative agreement has been reached for a joint federal-provincial inventory of the water resources of the entire Saskatchewan and Nelson River systems. This covers a network stretching from Hudson Bay and the Lake of the Woods to the Rocky Mountains. Joint Canada-Manitoba studies for extensive power development of the Nelson River, including diversion from the Churchill River, were completed early this year. Work on Nelson River power sites is already underway.

The Canadian Prairie region can look forward to maximum development of its agricultural potential made possible by water for irrigation. It can also look forward to major developments in mineral, fossil and forest resources. The logical consequence of such development will be a major petrochemical industry, metal producing industries, pulp and paper industries - and these all call for large supplies from the annual flow available.

The northward course of our Prairie empire is already being staked out by prospectors and timber cruisers. It has already reached the great tributaries of the Mackenzie system -- the Peace and the Athabasca. Massive lead-zinc deposits are being mined at Pine Point on Great Slave Lake -- one of the huge natural balancing reservoirs of the Mackenzie system. The federal government is financing a feasibility study for a smelter at Pine Point. Mineral resources have already been staked out in the region of another great Mackenzie reservoir, Great Bear Lake.

Considering the vast potential for development of the Canadian Prairies, it seems unlikely that the waters of the Canadian cordillera would ever reach the Great Lakes as NAWAPA proposes. What does seem possible is the rerouting of waters flowing into Hudson Bay to the Prairie region. NAWAPA, however, offers to bring western water to the Great Lakes - an offer which had rather more appeal in 1964 when the levels were low than is the case today, now that they have recovered. Here I am dealing with a matter in which I have had a close personal interest and responsibility as Chairman of the Canadian Section of the I.J.C. in the flood year of 1952 and later. The proponents seem to be quite unfamiliar with the experience during the high water year of 1952, and with the very careful studies made then and subsequently. These studies showed the sensitivity of the basin to the cumulative effects of even a short succession of years of supply only slightly above normal. The limiting factors are the great industrial and municipal developments which have taken place along the shores of the Great Lakes and more particularly along the connecting channels whose capacities have been formed by the rivers through long ages to accommodate natural flows. Any cumulative increase in net supply is accompanied by large sustained increases in levels and the damage, even for very small changes in levels, is disproportionately severe. This is found in the surveys conducted by the I.J.C. in 1952-53 and is reflected in the damage claims that were made at that time and for which, even after the lapse of more than a decade, Canada is about to be sued by interests in the United States.

I would mention that the costs of channel enlargements to correct the situation in high supply years would be very large, and such enlargements would accentuate the difficulties in low supply years.

Moreover, the investigations showed that the time required for changes in supply to pass through the system is very long, and the relationship is very complex. Consequently, for controlled changes in inflow to the system to stabilize levels and flows would require an ability to predict natural supply for a period farther into the future than is foreseeable, and without this ability to predict, artificial changes in supply would aggravate periodic crises and in particular increase the danger of flooding, which already causes the greatest anxiety.

In my address to the Canadian Club in Montreal last October, I referred to some of the serious legal and political implications of the NAWAPA scheme. I observed at that time that this is a concept, monstrous not only in terms of physical magnitude, but monstrous also in another and more sinister sense in that the promoters would displace Canadian sovereignty over the national waters of Canada, and substitute therefor a diabolic thesis that all waters of North America become a shared resource of which most will be drawn off for the benefit of the United States, midwest and southwest regions where existing desert areas will be made to bloom at the expense of development in Canada.

It is evident that the NAWAPA proposal contemplates that the complete jurisdiction and control will rest with a corporation which although it might be nominally international, would in reality be dominated by Americans who would thereby acquire a formidable vested interest in the national waters of Canada. With this mammoth inroad into Canada's lawful rights and interests, the corporation would inevitably, in the nature of things, have to assume quasi-sovereign power to administer large areas of Canada at the expense of Canadian sovereignty.

I was very interested to hear the comment of an American, William S. Foster, editor of "The American City" speak of the implications of water export on a CBC television program on the politics of water on April 11th. Mr. Foster said (and I quote):

"There's a great deal of risk. Offhand at first glance, you would say that the risk is great for the southwest because the water belongs to Canada, and presumably if at Canada's wish, it could simply turn off the valve and the water would not be there any more. But there is a more subtle threat than that. I wonder just what would happen to the sovereignty of Canada if a nation like the United States and a nation like Mexico would suddenly say that 'you no longer have the right to deny us the water even though you need it in your own industrial and agricultural development'. I've often thought about that and wondered what the really long range risks are to Canada, and I think they're considerable." (end of quote).

The situation in the U.S. southwest is that any additional water which becomes available is forthwith applied to irrigation and so if cheap Canadian water is supplied, as it is now under the Columbia River Treaty, and would be under the NAWAPA plan, it will be immediately appropriated by the irrigators. Large increases in population and investment may be anticipated: and there does not appear to be any cheap replacement should the Canadian water be recalled.

You will appreciate the serious probability of conflict in that situation when I mention that the Canadian Minister of External Affairs has given assurances to the External Affairs Committee of Parliament that under the Columbia River Treaty, the Protocol, and the Sales Agreement, Canada can make use of waters of Canadian origin for consumptive purposes at any time and in conjunction with power generation in transit. When Canada does exercise this reservation, which I regard as inevitable, will the U.S. acquiesce in this interpretation of provisions in the Protocol agreed to by the Executive of the United States but not included in the ratification by the U.S. Senate?

May I say that I believe that such a situation is much too hazardous to be left to a giant corporation dominated by U.S. interests. Canada faced a similar situation 25 years ago when it exported electric power to the United States on yearly permit. When under dire necessity of war we wanted it back we met a curt refusal. I do not think Canada should ever again expose herself to such an outcome and most particularly over water which is an even more sensitive matter.

To me it is obvious that if we make a bargain to divert water to the U.S. we cannot ever discontinue or we will face force to compel compliance. There is nothing in our experience to date which indicates any change in the vigour with which our American friends pursue objectives which they deem in their national interests, however much this may hurt a neighbour who has unwittingly made a careless bargain in other circumstances.

Instance after instance can be cited in support of this observation from the case of the Similkameen River after World War I to the most recent example, when the Columbia River Treaty was hailed in the Senate of the United States as having achieved one major American objective, which was to prevent Canada making best use of her waters of Canadian origin in the Basin (Senate Hearings, 8 May 1961, Udall).

The imperative lesson is that we must be very careful in our discussions of vital problems related to water with the United States and very, very careful over the bargains which we may make to ensure that the rights we think we have are admitted and confirmed beforehand.

One of the ironic things about all of this fuss about the export of Canada's water to the United States is that the United States has abundant supplies of water for all of its needs. What is scarce in the United States is clean water, and this could be provided at less cost by proper administration and pollution control than by importation from Canada. In fact, I am inclined to believe that in the long run, perhaps one of the most unfriendly acts that Canada could do to the United States would be to offer our water at bargain prices. Because if we did, the attack on pollution might then be postponed until the problem was no longer soluble, and at the very least, the cost would be astronomical. This cost is large enough today, and it rises with every year that passes at an accelerating rate.

In the foregoing, I have sought to indicate some of the perils which face Canada in respect to the commitment of our water resources at this time. We have everything to lose by hasty and ill-considered action, and we have everything to gain by waiting until the essential information is available upon which we can make our own assessment of the subject of sharing resources and our own plans as to the course of action we will adopt.